

IN THE CLAIMS

1. (Currently Amended) A method for determining an optimal bid for an item in a market, said method comprising:
  - a) selecting characteristics of said market;
  - b) selecting a bidding model;
  - c) estimating a structure of said market, wherein unobservable variables are expressed in terms of observable bids by inverting said bidding model;
  - d) determining a bid function; and
  - e) determining said optimal bid.
2. (Original) The method as recited in Claim 1, wherein said step a) comprises:  
receiving a first user input, wherein said first user input comprises information identifying an item to be bid on;  
accessing a database;  
retrieving historical bids data from said database;  
retrieving auction characteristics data from said database, wherein said auction characteristics data comprise information relating to historical auctions of items similar to said item to be bid on;  
outputting said historical bids data; and  
outputting said auction characteristics data.
3. (Original) The method as recited in Claim 1, wherein said step b) comprises:  
receiving auction characteristics data;  
accessing a database;  
retrieving from said database said bidding model; wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and  
outputting said bidding model.

4. (Currently Amended) The method as recited in Claim 1, wherein said step c) comprises:
- receiving said bidding model;
  - receiving historical bids data;
  - ~~expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bidding model;~~
  - transforming said historical bids data to a sample of inverted bids, wherein said historical bids data are transformed by inverting said bidding model;
  - estimating a structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said structure; and
  - outputting said structure.
5. (Original) The method as recited in Claim 1, wherein said step d) comprises:
- receiving a second user input;
  - receiving a structure;
  - generating a bid function, wherein said bid function is based on said structure and said second user input; and
  - outputting said bid function.
6. (Original) The method as recited in Claim 5, wherein said second user input comprises:
- an auction format;
  - a valuation of said item; and
  - an expected number of rival bidders.
7. (Original) The method as recited in Claim 1, wherein said step e) comprises:
- receiving a third user input, wherein said third user input comprises an evaluation criteria;
  - receiving said bid function;
  - calculating said optimal bid based on said third user input and said bid function; and
  - outputting said optimal bid.

8. (Currently Amended) A computer system comprising:
- a bus;
  - a memory interconnected with said bus; and
  - a processor interconnected with said bus, wherein said processor executes a method for determining an optimal bid for an item in a market, said method comprising:
    - a) selecting characteristics of said market;
    - b) selecting a bidding model;
    - c) estimating a structure of said market, wherein unobservable variables are expressed in terms of observable bids by inverting said bidding model;
    - d) determining a bid function; and
    - e) determining said optimal bid.
9. (Original) The computer system as recited in Claim 8, wherein said step a) comprises:
- receiving a first user input, wherein said first user input comprises information identifying an item to be bid on;
  - accessing a database;
  - retrieving historical bids data from said database;
  - retrieving auction characteristics data from said database, wherein said auction characteristics data comprise information relating to historical auctions of items similar to said item to be bid on;
  - outputting said historical bids data; and
  - outputting said auction characteristics data.
10. (Original) The computer system as recited in Claim 8, wherein said step b) comprises:
- receiving auction characteristics data;
  - accessing a database;
  - retrieving from said database said bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and

outputting said bidding model.

11. (Currently Amended) The computer system as recited in Claim 8, wherein said step c) comprises:

receiving said bidding model;

receiving historical bids data;

~~expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bidding model;~~

transforming said historical bids data to a sample of inverted bids, wherein said historical bids data are transformed by inverting said bidding model;

estimating a structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said structure; and

outputting said structure.

12. (Original) The computer system as recited in Claim 8, wherein said step d) comprises:

receiving a second user input;

receiving a structure;

generating a bid function, wherein said bid function is based on said structure and said second user input; and

outputting said bid function.

13. (Original) The method as recited in Claim 12, wherein said second user input comprises:

an auction format;

a valuation of said item; and

an expected number of rival bidders.

14. (Original) The computer system as recited in Claim 8, wherein said step e) comprises:

receiving a third user input, wherein said third use input comprises an evaluation criteria;

receiving said bid function;  
calculating said optimal bid based on said third user input and said bid function; and  
outputting said optimal bid.

15. (Currently Amended) A computer readable medium for causing a computer system to execute the steps in a method for determining an optimal bid for an item in a market, said method comprising:

- a) selecting characteristics of said market;
- b) selecting a bidding model;
- c) estimating a structure of said market, wherein unobservable variables are expressed in terms of observable bids by inverting said bidding model;
- d) determining a bid function; and
- e) determining said optimal bid.

16. (Original) The computer readable medium as recited in Claim 15, wherein said step a) comprises:

receiving a first user input, wherein said first user input comprises information identifying an item to be bid on;  
accessing a database;  
retrieving historical bids data from said database;  
retrieving auction characteristics data from said database, wherein said auction characteristics data comprise information relating to historical auctions of items similar to said item to be bid on;  
outputting said historical bids data; and  
outputting said auction characteristics data.

17. (Original) The computer readable medium as recited in Claim 15, wherein said step b) comprises:

receiving auction characteristics data;  
accessing a database;

retrieving from said database said bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and  
outputting said bidding model.

18. (Currently Amended) The computer readable medium as recited in Claim 15, wherein said step c) comprises:

receiving said bidding model;  
receiving historical bids data;  
~~expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bidding model;~~  
transforming said historical bids data to a sample of inverted bids, wherein said historical bids data are transformed by inverting said bidding model;  
estimating a structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said structure; and  
outputting said structure.

19. (Original) The computer readable medium as recited in Claim 15, wherein said step d) comprises:

receiving a second user input;  
receiving a structure;  
generating a bid function, wherein said bid function is based on said structure and said second user input; and  
outputting said bid function.

20. (Currently Amended) The computer readable medium ~~method~~ as recited in Claim 19, wherein said second user input comprises:

an auction format;  
a valuation of said item; and

an expected number of rival bidders.

21. (Original) The computer readable medium as recited in Claim 15, wherein said step e) comprises:

receiving a third user input, wherein said third user input comprises an evaluation criteria;

receiving said bid function;

calculating said optimal bid based on said third user input and said bid function; and

outputting said optimal bid.